

REMARKS

Reconsideration of the above-identified application, as amended, is respectfully requested.

In the Office Action, the Examiner first noted a variety of informalities that applicants have addressed in response; namely, the indication of the current status of the applicants corresponding parent application, and, a correction of Claim 23 which had been objected to by the Examiner.

In the Office Action, the Examiner then rejected Claims 1-9, 11-18 and 23-30 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,817,093 to Williamson IV et al. (hereinafter "Williamson") in view of Malis et al. (U.S. Patent No. 5,318,563) (hereinafter "Malis"). Furthermore, the Examiner finally rejected Claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Williamson in view of Malis and further in view of Sherman (U.S. Patent No. 6,050,994 (hereinafter "Sherman"))).

In the Office Action, the Examiner then rejected Claims 1-18 and 23-30 under judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-4 of U.S. Patent No. 6,730,080. In response to this rejection, applicants respectfully submit a Terminal Disclaimer executed by one Thomas Spinelli who is duly authorized to act in a representative manner for executing the Terminal Disclaimer provided herewith.

With respect to the rejection of Claims 1-9, 11-18 and 23-30 under 35 U.S.C. §103(a) as being unpatentable over Williamson in view of Malis, applicants respectfully disagree.

Particularly, applicants revert to their prior arguments on record that distinguish the claims over Williamson IV, i.e., that the application of high-frequency power

in the Williamson device appears to be continuous, and not intermittent, as in the present invention. While Williamson teaches possible periodic measurements of tissue impedance for feedback control, Williamson does not appear to teach or suggest the intermittent control (repeated continuous and discontinuous application) of high-frequency power that enables tissue coverage over a wide range.

As stated in the present specification, when a living tissue is coagulated over a wide range, the impedance offered by the living tissue during each delivery period gets larger than the one offered thereby during an immediately preceding delivery period. Likewise, the temperature exhibited by the living tissue during each delivery period gets higher than the one exhibited thereby during the immediately preceding delivery period. Moreover, rates at which the impedance of the living tissue increases during each delivery period and the temperature thereof rises during the same period get higher than the ones at which the impedance increases during the immediately preceding delivery period and the temperature rises during the same period. Rates at which the impedance of the living tissue decreases during each pause period and the temperature thereof drops during the same period get higher accordingly. Owing to this nature of living tissues, the control circuit of the invention judges over how wide a range a living tissue has been coagulated and, according to the invention, high-frequency output power is delivered intermittently. Particularly, as claimed in amended Claims 1 and 23, after a first delivery (time) interval, each successive power delivery interval is of equal to or a shorter time duration than an immediate prior interval to enable tissue coverage over a wide range.

Williamson does not teach this, nor is Malis of any help in this regard as Malis teaches application of damped, aperiodic uniform width bursts of high-frequency energy.

Thus, contrary to the Examiner's indication in the "Response to Arguments" section (page 5 of the Office Action), aperiodic application is not indicative of duty cycle control (which is periodic). Thus, in distinction, Claims 1 and 23 recite that after a first time interval, each successive power delivery interval is of equal or a shorter time duration than an immediate prior interval to enable tissue coverage over a wide range, in response to biomedical feedback information (See Figures 5A, 7A, 8A, 9A, 12A, 15A, ..., 40A... etc. of the present application). This is neither taught nor suggested by the cited references.

Thus, the Examiner's rejection is respectfully traversed and based on these arguments, the Examiner is respectfully requested to withdraw the rejections of amended Claim 1 and Claim 23 which are distinguishable over Williamson and Malis. In view of the foregoing, and by virtue of its dependency, the Examiner is respectfully requested to withdraw the rejection of Claim 10 which is distinguishable over Williamson, Malis and Sherman for the same reason.

If the Examiner believes that a telephone conference with Applicant's attorney would be advantageous to the disposition of this matter, the Examiner is requested to telephone the undersigned.

Respectfully submitted,



Steven Fischman
Registration No. 34,594

Scully, Scott, Murphy & Presser
400 Garden City Plaza, Suite 300
Garden City, New York 11530
(516) 742-4343

SF:gc